

DOCUMENT RESUME

ED 324 295

SP 032 629

TITLE Teaching Teachers: Facts & Figures. RATE 111:
Research About Teacher Education Project.

INSTITUTION American Association of Colleges for Teacher
Education, Washington, D.C.

REPORT NO ISBN-0-89333-064-7

PUB DATE 90

NOTE 56p.; For previous RATE reports, see ED 292 774 and
ED 304 410.

AVAILABLE FROM American Association of Colleges for Teacher
Education (AACTE) Publications, One Dupont Circle,
Suite 610, Washington, DC 20036-2412 (\$15.00).

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS College Faculty; Elementary Education; Higher
Education; *Institutional Characteristics; Preservice
Teacher Education; *Program Attitudes; *Schools of
Education; *Student Characteristics; *Teacher
Education Programs; *Teacher Educators

IDENTIFIERS Research About Teacher Education Project

ABSTRACT

This monograph presents information about institutions of higher education where teachers are educated and about the faculty, students, and programs of these institutions. Information is presented under six headings: (1) "Introduction and Methodology" (Gary Galluzzo); (2) "Institutional Characteristics" (Richard Arends and Gary Galluzzo); (3) "Students: A Profile" (Antoine Garibaldi and Nancy Zimpher); (4) "The Elementary Education Professoriate" (Mary Kluender and Edward Ducharme); (5) "Student and Faculty Perceptions of Program Quality" (Kenneth Howey); and (6) "Multiple Purposes for Using Data in Teacher Education" (Sam Yarger). Ninety institutions taken from the AACTE membership list of 713 institutions constituted the sample; 1,141 elementary education preservice teachers and 251 professors in elementary education returned their questionnaires. Faculty and student questionnaires supplied demographic information as well as information such as age, gender, race/ethnicity, and salary; and respondents' opinions concerning the quality of programs, the rigor of coursework and requirements, and students' future teaching plans. The institutional questionnaire solicited information characterizing the institutions: their enrollments, the academic abilities of their enrollees, and selected features of the elementary education programs offered. Findings are presented in tables and graphs accompanied by narrative discussion. (JD)

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AACTE acknowledges with appreciation the time and resources donated by Western Kentucky University and the University of Maryland in preparing this document for printing.

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AACTE Publications
One Dupont Circle, Suite 610
Washington, DC 20036-2412
Single copy price \$15 prepaid

Printed in the United States of America

International Standard Book Number: 0-89333-064-7
Library of Congress Catalog Card Number: 90-81576

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ACKNOWLEDGMENTS

This RATE report, the third, is the product of an ongoing collaborative research effort. At the time of publication of this monograph, plans ARE under way for the data analysis for the RATE IV report. Each year AACTE's Research and Information Committee members carefully plan the survey questionnaires and pilot the items in an effort to provide data useful to the profession. The information generated by the RATE Project reflect the individual commitments of eight committee members: Richard Arends (University of Maryland); Edward Ducharme (University of Vermont); Gary Galluzzo, cochair (Western Kentucky University); Antoine Garibaldi (Xavier University, Louisiana); Kenneth Howey, cochair (Ohio State University); Mary Kluender (University of Nebraska); Sam Yarger (University of Wisconsin-Milwaukee); and Nancy Zimpfer (Ohio State University). Sam Yarger was the first chair of the committee, and his institution, along with the University of Maryland, provided generous support to the project during his tenure. Generous institutional support is now provided by Western Kentucky University, where the data are analyzed.

Members of the staff at AACTE contribute in many ways. Mary Dilworth, director of Research and Information Services and the ERIC Clearinghouse on Teacher Education, plays an important role as staff liaison between the Research and Information Committee and the AACTE office. Sharon Givens, editor of this and previous RATE reports, performs her responsibilities with skill and enthusiasm.

Cathy Lewis at Western Kentucky University provided many hours of assistance in preparing this manuscript; and, Natalie Eastman, a graduate assistant assigned to this project, devoted countless hours to coordinating the retrieval and preparation of the data. Most important, however, in a study of this type, is data collection; the research representatives who coordinated the data collection on their individual campuses deserve the profession's deepest gratitude and thanks. Without their unending effort to collect reliable and accurate data, there would be no RATE reports. The names of the participating institutions are listed in the Appendix.

FOREWORD

The RATE Project reveals some encouraging signs of vitality in the practice of teacher education and raises some concerns that we, as a profession, should be addressing. Continuing a trend found in the two previous RATE studies, enrollments in our schools, colleges, and departments of education again increased substantially. Moreover, enrollments in teacher education increased as a percentage of total enrollments in institutions. Concurrently, as enrollment in teacher education increases, so does the academic profile of matriculated students. College entrance scores indicate that preservice teachers are not from the bottom of their high school classes but reflect the norm of all college-going high school graduates.

The data from the student questionnaire in the RATE studies indicate that White women dominate the teacher education programs across the nation and that minority students account for approximately 10 percent of all enrollments. For the third year, the RATE data suggest that the typical elementary education preservice teacher is a White woman about 25 years old. She chose a college/university that is within easy driving distance of home and she would like to teach near home after completing her program. Three-quarters of the students are very positive about teaching as a career. Almost all of the student respondents will seek a teaching position on graduation, and many would consider being a cooperating teacher or mentor in the future.

The professoriate in elementary education reflects the data in previous RATE studies. Elementary education professors tend to be tenured White men who have had a variety of experiences in elementary and secondary schools. How professors spend their time during the week varies by institutional stratum. In baccalaureate-level institutions, the professors spend more time in instruction than do their colleagues at master's- and doctoral-level institutions, where scholarly productivity is accentuated.

Students' and professors' perceptions of their programs suggest considerable agreement that programs are achieving satisfactory results. The faculty invest large amounts of time and energy into their programs and report being satisfied with their contributions to the total program. Similarly, the students feel positive about their preparation for a full-time teaching position.

We conclude this monograph with an overview analysis of how data of the type generated by the RATE Project can be used by fellow researchers as well as by institutions. Often throughout the RATE Project our institutional research representatives have told us that just collecting the data asked for on the RATE questionnaires has been informative. We conclude that the types of information we have focused on can be helpful in furthering research, allocating resources, and monitoring the profession.

The findings throughout this monograph can be used to monitor and assess the vitality of teacher education. The RATE studies provide one set of data to help us continue the important dialogue on improving how we conduct this most important responsibility, the education of educators.

GARY GALLUZZO
Cochair, RATE Project

INTRODUCTION AND METHODOLOGY

Since 1985 the Committee on Research and Information of the American Association of Colleges for Teacher Education (AACTE) has been conducting the Research About Teacher Education (RATE) Project. The purpose of the RATE Project is to collect reliable and accurate information about institutions of higher education where teachers are prepared and about the faculty, students, and programs at these institutions. From its inception, the RATE Project was envisioned as an effort to establish a reliable data base on teacher education that can be used by other teacher educators to pursue further inquiry, to compare their own programs to a national profile, and to stimulate discussion across the profession. Toward these ends, the RATE Project should be seen as useful in "taking the pulse" of the profession with an eye toward improving practice.

The data reported in this monograph were taken from three questionnaires--institutional, faculty, and student. The surveys were sent to a sample of schools, colleges, and departments of education (SCDEs) in the spring term of 1988. The data requested on the institutional questionnaire covered the 1987 calendar year, and the data on the student and faculty questionnaires, collected directly from faculty members and students, pertained to the spring term of 1988. The data were collected by campus-based research representatives who were trained by the RATE researchers at the 1988 AACTE annual meeting in New Orleans. Each research representative was given a *Research Representatives Manual* in which the data collection methods are outlined. (See the Appendix for a list of participating institutions.)

Sampling Techniques

Ninety institutions randomly sampled from the AACTE membership list of 713 institutions constituted the sample for this year's RATE Project. The AACTE

membership list was stratified into three groups according to the highest degree offered by the school, college, or department of education. From each stratification a sample of 30 institutions was selected, for the total of 90 institutions. The stratifications are as follows:

- Stratum 1 Bachelor's: Representing 232 AACTE member institutions offering baccalaureate programs in education
- Stratum 2 Master's: Representing 318 AACTE member institutions offering baccalaureate, master's, and sixth-year degree programs in education
- Stratum 3 Doctoral: Representing 163 AACTE member institutions offering baccalaureate, master's, sixth-year, and doctoral degree programs in education

The number of students responding this year exceeded the number of usable student questionnaires returned in the first two years of the RATE Project. This year 1,141 elementary education preservice teachers returned the student questionnaire. This difference is most likely due to the ease the research representatives had in identifying students enrolled in an elementary education program. The number of faculty respondents--professors in elementary education--also exceeded the number in the first two years of the RATE Project, with 251 respondents this year.

The questions for the faculty and student questionnaires were developed with a concern for eliciting information that could be useful in improving teacher education programs. These two groups supplied demographic information as well as information such as age, gender, race/ethnicity, and salary. The questionnaires also sought the respondents' opinions concerning the quality of their programs, the rigor of their coursework and requirements, and their future teaching plans. On several occasions faculty members and students responded to the same item so that their opinions could be compared. The institutional questionnaire solicited information characterizing the institutions, their enrollments, the academic abilities of the enrollees, and selected features of the elementary education programs offered.

At the 95 percent confidence level, the error estimate for the institutional questionnaire ranges between one-fifth and one-third of a standard deviation, or between 2 and 10 percent for proportional data. There is some variability among strata: Stratum 2 institutions provide the fewest number of complete data sets, and Stratum 3 institutions provide more than either Stratum 1 or Stratum 2.

The data collected for RATE I focused on secondary methods courses, the faculty who taught them, and the students. The data collected for RATE II focused on foundations courses and the faculty and students in those courses. The current report, RATE III, focuses on elementary education programs, the faculty who teach in them, and the students enrolled in them. These various foci reflect a decision by the Research and Information Committee that certain data need to be collected only on a five-year cycle. For example, some aspects of demographics of students and

faculty as well as many characteristics of the institutions do not change enough annually to be included in each administration.

Instrumentation

In an effort to design questionnaires that retain the attention of the respondents (faculty and student questionnaires that require 25 to 30 minutes to complete), a number of items were removed so that new items could be added. Some items, as appropriate, were altered to fit the new target population, students and professors in elementary education. The institutional questionnaire requires more time, as much of what is sought is not easily accessible in the typical SCDE. All other aspects of the study, including the development of the *Research Representatives Manual*, the training session, and the delivery and retrieval of the questionnaires remain the same. For this year, with the shift in data analysis from the University of Wisconsin-Milwaukee to Western Kentucky University, the data were analyzed using the Statistical Analysis System (SAS). The data in this report are descriptive and are reported using measures of central tendency and cross-tabulations by category or interval. Aggregate data are weighted. Numbers in the tables and figures may not total 100 percent, as a result of rounding.

INSTITUTIONAL CHARACTERISTICS

Types of Institutions Surveyed

This section of the RATE report describes selected features of the institutions that offer teacher education. This section focuses on the characteristics of the respondent institutions, their enrollments in teacher education, the academic abilities of preservice teachers, and selected characteristics of elementary teacher education programs.

The response rate for the third year of the RATE Project was 85.5 percent, with 77 of the 90 institutions returning the institutional questionnaire. Table 1 classifies institutions that participated in RATE III according to five types of historical mission: public land grant college, public non-land grant college, private independent college, church-related liberal arts college, and private university.

Table 1
Historical Tradition of Institutions That House Teacher Education

	Public Land Grant	Public Non-Land Grant	Independent Liberal Arts	Church- Related Liberal Arts	Private University	Other	Total
Bachelor's	3	3	2	16	2	0	26
Master's	2	11	1	6	2	0	22
Doctoral	12	13	0	0	3	1	29
Total	17	27	3	22	7	1	77

Source: 1988 RATE Project Institutional Survey

The data indicate that teacher education is offered by a variety of institutions. Church-affiliated colleges and universities predominate at the baccalaureate level, while publicly supported institutions dominate the doctoral level. Virtually every type of institution offers the master's degree, with public non-land grant institutions the most numerous in this stratum.

This section of the report contains data about the institutions that participated in AACTE's Research About Teacher Education (RATE) studies over the past three years and about enrollment patterns in these institutions. Data collection procedures for the three survey periods are summarized below:

- | | |
|----------|--|
| RATE I | Data were collected during the spring of 1986 and reflected institutional enrollments for fall semester 1985. |
| RATE II | Data were collected during the spring of 1987 and reflected institutional enrollments for fall semester 1986. |
| RATE III | Data were collected during the spring of 1988 and reflected institutional enrollments for fall semester of 1987. |

Data from RATE I and RATE II have been analyzed and reported in AACTE's *RATE I - Teaching Teachers: Facts and Figures, 1987* and in *RATE II - Teaching Teachers: Facts and Figures, 1988*.

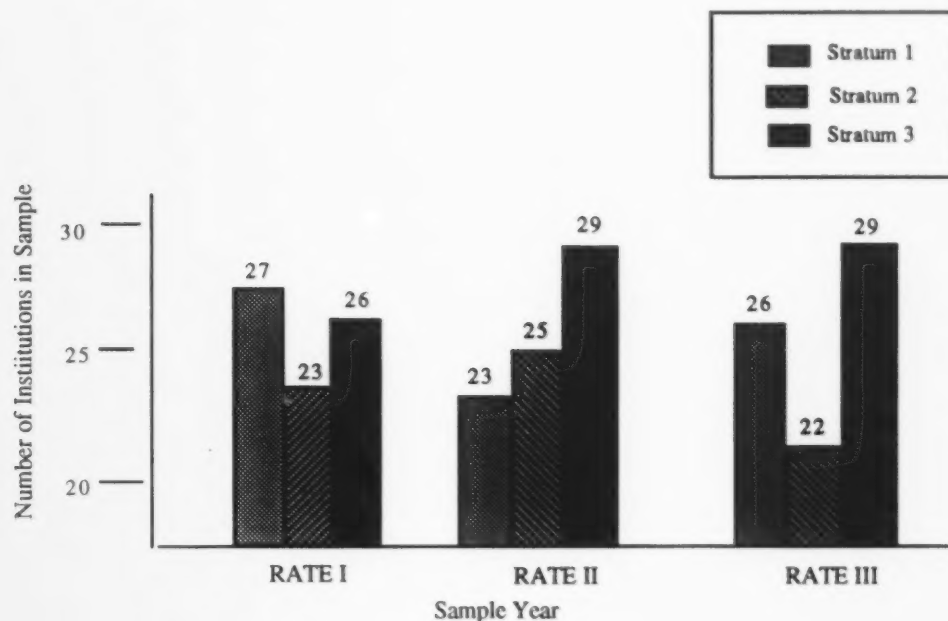
Degree-granting Status of Institutions Surveyed

Just as institutions vary in mission, they vary in size and in the types of degrees they award. To represent these differences, the RATE studies' sampling procedures selected institutions from three categories:

- Stratum 1: Smaller institutions that grant only bachelor's degrees
- Stratum 2: Medium-sized institutions that grant master's degrees
- Stratum 3: Larger multipurpose universities that grant doctoral degrees

Figure 1 below shows the number of institutions in the sample categorized by stratum for the three survey periods.

Figure 1
Number of Institutions in Sample for the Three Survey Periods



Source: 1986, 1987, 1988 RATE Project Institutional Surveys

Over the three survey periods the distribution across strata has remained fairly constant, with minor increases in the number of Stratum 3 institutions and slight decreases in Stratum 1 institutions.

Size of Institutions Surveyed

The institutional questionnaire asked respondents to report the number of students enrolled for the calendar year prior to the survey period. This means that enrollment data for RATE I represented head counts for fall semester 1985; RATE II, fall semester 1986; and RATE III, fall semester 1987. Institutions were also asked to designate whether students were enrolled as undergraduate, postbaccalaureate, or graduate students and whether they attended school full-time or part-time. Table 2 shows the mean enrollments in the sample for the three survey periods.

Table 2
Mean Enrollments in Institutions for the Three Survey Periods

	RATE I	RATE II	RATE III
Stratum 1	1,660	1,849	2,072
Stratum 2	6,876	5,307	6,411
Stratum 3	17,380	17,138	17,594

Source: 1986, 1987, 1988 RATE Project Institutional Surveys

These data indicate that for each of the three survey periods, the sample consisted of institutions in Stratum 1 with total enrollments of around 2,000 students; institutions in Stratum 2 around 6,000; and institutions in Stratum 3 around 17,000.

Enrollment Trends

Size of education units surveyed. This section of the RATE III report highlights four enrollment trends in teacher education over the three survey periods: (1) average enrollments in SCDEs; (2) SCDE enrollments as a percentage of enrollments within entire institutions; (3) the percentage of students seeking postbaccalaureate certification; and, (4) enrollment patterns by program. The data in Table 3 show the number of students enrolled in SCDEs at the various types of colleges and universities in the sample. The data highlight the diversity in the size of the education units across the three strata and illustrate some similar and some changing patterns over the three survey periods.

Table 3
Mean Enrollments in SCDEs for the Three Survey Periods

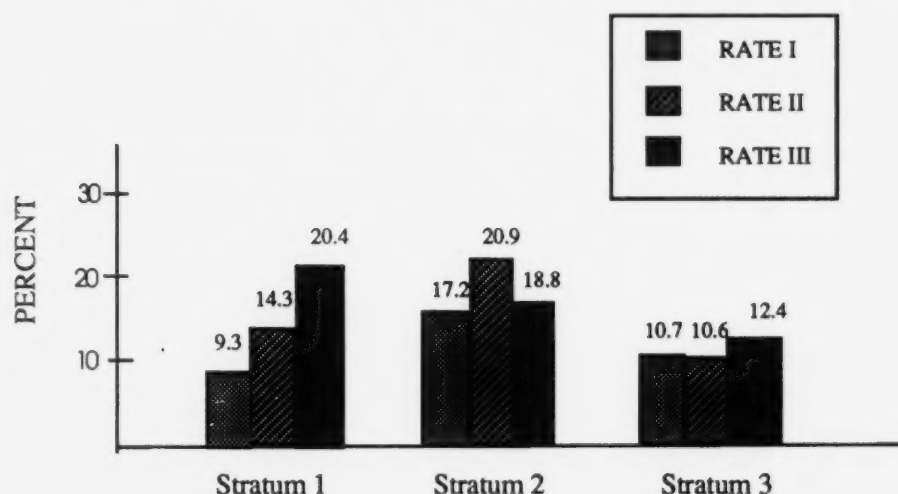
	RATE I	RATE II	RATE III
Stratum 1			
Undergraduate, full-time	204	236	244
Undergraduate, part-time	116	16	2
Postbaccalaureate, full-time	10	7	5
Postbaccalaureate, part-time	9	5	2
Graduate, full-time	-	-	79
Graduate, part-time	-	-	58
Stratum 2			
Undergraduate, full-time	552	527	556
Undergraduate, part-time	113	91	147
Postbaccalaureate, full-time	29	38	33
Postbaccalaureate, part-time	122	129	148
Graduate, full-time	48	52	54
Graduate, part-time	317	271	270
Stratum 3			
Undergraduate, full-time	906	776	912
Undergraduate, part-time	134	146	148
Postbaccalaureate, full-time	31	51	58
Postbaccalaureate, part-time	76	171	202
Graduate, full-time	218	188	212
Graduate, part-time	498	488	651

Source: 1986, 1987, 1988 RATE Project Institutional Surveys

Approximately 80 percent of the students enrolled in undergraduate SCDEs attend full time. Undergraduate enrollment increased as a percentage of total enrollment in both Stratum 1 and Stratum 2 institutions, and also increased in total numbers. At the same time, the enrollment of full-time graduate students in Strata 2 and 3 institutions decreased as a percentage of total enrollment.

SCDE enrollments in relation to institutional enrollments. One indicator of the health of SCDEs is the number of students enrolled in education programs compared with those enrolled in the total institution. (See Figure 2.)

Figure 2
SCDE Enrollments as a Percentage of Institutional Enrollments

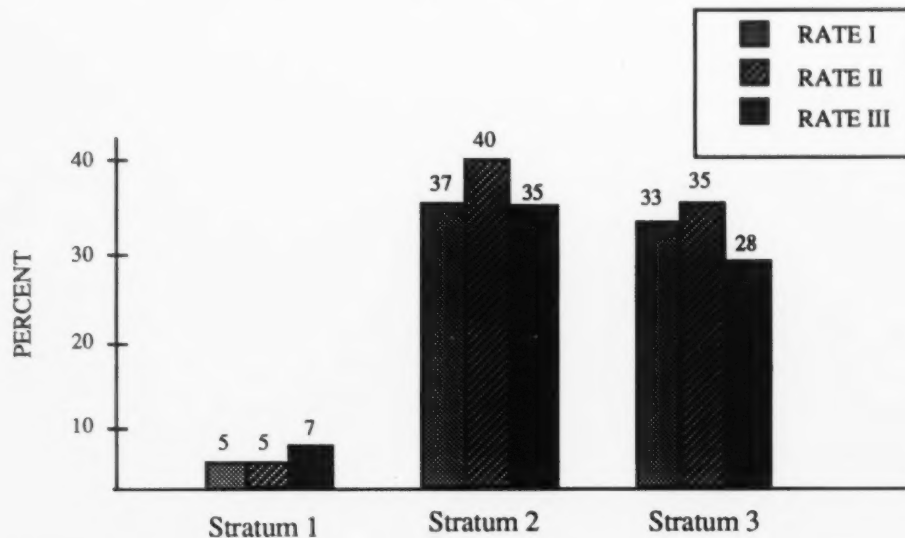


Source: 1986, 1987, 1988 RATE Project Institutional Surveys

Enrollments, as a percentage of total enrollments, increased most significantly in Stratum 1 institutions each year, representing an increase in teacher education enrollments in these institutions. Enrollments in SCDEs in Strata 2 and 3 institutions also increased over the survey period, although these increases were not as large as those in Stratum 1 institutions.

Postbaccalaureate teacher education. One of the major recommendations for teacher education reform over the past several years is to move teacher education to the postbaccalaureate level. The percentage of students preparing for teaching at this level is portrayed in Figure 3.

Figure 3
Percentage of Students Enrolled in Postbaccalaureate or Graduate
Teacher Education Programs for the Three Survey Periods

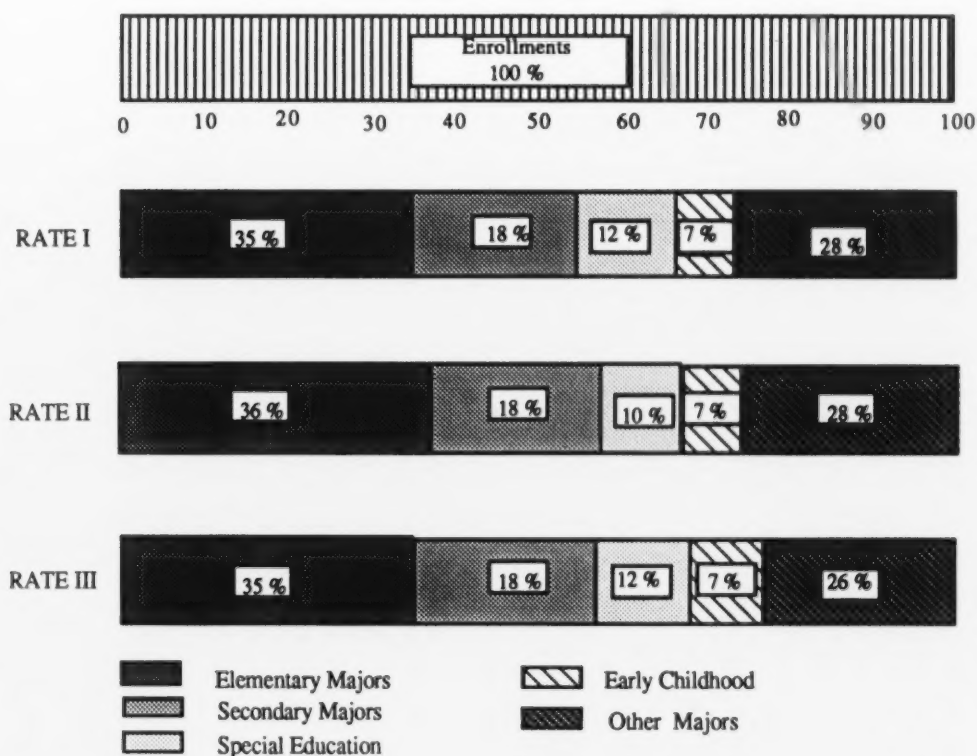


Source: 1986, 1987, 1988 RATE Project Institutional Surveys

Data in Figure 3 show that a sizable portion of students preparing for teaching in Stratum 2 and Stratum 3 institutions are enrolled in postbaccalaureate programs, although the percentage declined slightly between RATE I and RATE III. The percentage of students in postbaccalaureate programs in Stratum 1 institutions is increasing slowly. In fact, five of the Stratum 1 institutions in the RATE III sample reported offering master's degrees for students preparing to teach.

Enrollment patterns by program. The institutional questionnaire also asked respondents to designate the specific programs in which preservice teachers were enrolled. (See Figure 4.)

Figure 4
Enrollment Patterns by Program for the Three Survey Periods



Source: 1986, 1987, 1988 RATE Project Institutional Surveys

Students exhibited essentially the same patterns in selecting the programs of study in all three survey periods. Slightly more than one-third were preparing for careers in elementary teaching; slightly less than 20 percent in secondary teaching, and 11 and 7 percent, respectively, in special education and early childhood education. Approximately 28 percent were enrolled in programs categorized as "other," which includes subjects such as physical education, art, music, industrial arts, and home economics.

Characteristics of Students

Academic ability. How capable are the students who aspire to be teachers? Popular characterizations indicate that preservice teachers score at the bottom of the distribution on the Scholastic Aptitude Test (SAT) and rank at the bottom of their high school graduating classes. The data for these popular characterizations are taken from reports supplied by the College Board, which presents the SAT scores of high school juniors who indicate on the SAT answer sheet

that they would consider careers in education. In the RATE investigations of students enrolled in teacher education programs, the academic abilities of the students are measured by using the SAT, ACT, and high school class rank. The academic profile of the typical preservice teacher is completely different from that of the popular characterizations. According to the RATE data, the typical preservice teacher in elementary education graduated in the top third of his or her high school class. Moreover, he or she averaged a combined score of 898 on the SAT, which is close to the national average of 906 for all entering college freshmen as reported by the College Board (1988) and far exceeds the average for the College Board's "Intended Major-Education" average of 845. Table 4 displays the academic profile for preservice teachers in early childhood education, elementary education, secondary education, and special education.

Table 4
Academic Profile of Preservice Teachers

	Early Childhood		Elementary Education		Secondary Education		Special Education	
	N	X	N	X	N	X	N	X
High School Rank	4	77	8	72	8	73	4	76
SAT: Verbal	12	418	20	436	20	461	12	450
SAT: Math	12	441	20	462	20	494	12	461
ACT: English	9	20	26	20	26	20	17	20
ACT: Math	9	16	26	17	26	20	17	17

N = number of responding institutions

Source: 1988 RATE Project Institutional Survey

It is important to note that only about half of the institutional sample is able to report the SAT/ACT scores for preservice education students, and an extremely small subset can provide data on high school rank.

Gender and racial/ethnic composition. Who aspires to teach? What is the future of minority representation in teaching? These are two of the most-often-asked questions about teachers of the future. To no one's surprise, tradition persists. White women still overwhelmingly predominate professional education classes. Women constitute almost 90 percent of all preservice teachers in baccalaureate programs, and of that 90 percent, 95 percent are White and 3 percent are Black.

Typical Elementary Education Program

What is the typical elementary education program? In the first year of the RATE Project, it was reported that the typical elementary education program consisted of approximately 132 semester hours. The aggregate profile of the elementary education program consisted of general studies (58 credits), professional studies (42 credits), an area of concentration (20 credits), and student teaching (12 credits). This year's survey describes in greater detail the nature of elementary education programs. Of the 67 institutions responding to this question, 18 require an academic major averaging 32 credits, and 11 require an academic minor averaging 20 credits. No schools reported requiring more than one minor. Twenty-six schools require a concentration of about 20 credits, 11 require two concentrations totaling 42 credits, and 3 institutions require three concentrations totaling about 66 credits.

The professional sequence for elementary education preservice teachers includes six hours in the methods of teaching reading and approximately three hours each in the methods of teaching social studies, math, science, and language arts. Student teaching is typically completed in one setting and lasts about 12 weeks. At those institutions where student teaching is completed in two different settings, each placement lasts about seven weeks.

Certification. For what teaching areas are elementary education teachers certified? Despite recent national trends to reconsider certification areas (e.g., early childhood/primary education, intermediate grades, middle grades), the largest group of institutions follows traditional distinctions. Almost 26 percent of the responding institutions offer an elementary education program that leads to an omnibus certificate allowing a teacher to teach in any grade between kindergarten and eighth grade (K-8), and slightly more than 31 percent offer a program that leads to a certificate for the traditional elementary school--kindergarten through sixth grade (K-6).

STUDENTS: A PROFILE

The total sample in the 1988 national survey of students in elementary teacher education programs consists of 1,141 students. The sample is distributed according to the following institutional categories:

•Stratum 1	Baccalaureate degree only	263
•Stratum 2	Baccalaureate, master's sixth year, and specialist	372
•Stratum 3	Baccalaureate, master's, specialist, and doctorate	<u>506</u>
	Total	1,141

Demographic Data

The following analysis discusses the background characteristics of students. The mean age of students is 25.1 years. In this year's sample, students from Stratum 1 were the youngest (mean age 24.7); those from Stratum 3 were slightly older (mean age 25.0); and students from Stratum 2 were the oldest (mean age 25.5). Almost 93 percent of this year's student respondents were female. Slightly less than one-third (32.8 percent) of the student respondents were married, and the largest group of married students attended Stratum 3 institutions.

The racial and ethnic distribution described by the student respondents across all strata is consistent with the demographic data presented from the institutional survey. The composition of this year's sample of preservice elementary teacher respondents is as follows:

- 92.5 percent White
- 3.7 percent Black
- 2.2 percent Hispanic
- 0.97 percent Asian or Pacific Islander
- 0.44 percent American Indian or Alaskan Native

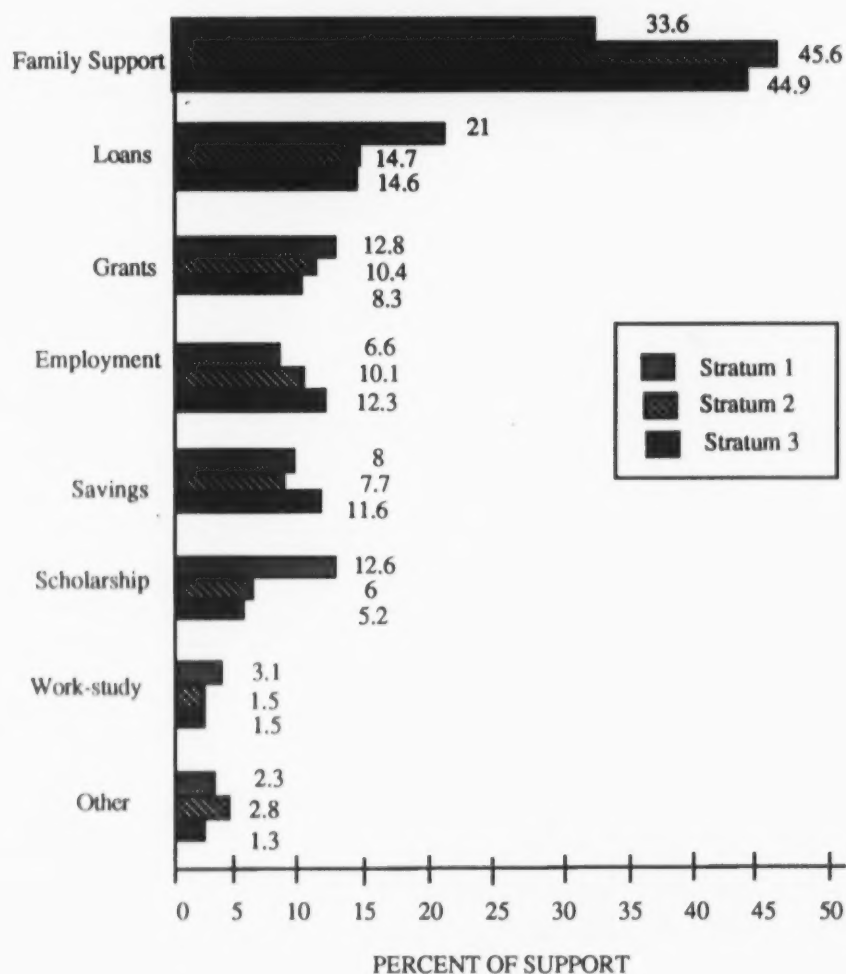
Nonwhite students were found primarily in Strata 2 and 3 institutions. A summary of the data from the first three years of the RATE Project reveals the continuing severity of the problem of recruiting and retaining minority students in teacher education programs. Further, students are overwhelmingly White and female particularly in elementary education; there is less diversity in these programs than in those examined in the previous RATE studies. For example, the majority of Black undergraduate students attend Strata 2 and 3 institutions, while the majority of Hispanics attend Stratum 2 institutions. There are so few respondents from ethnic or racial populations, however, that institutional type is less central than the fact that these groups are, in general, underrepresented in teacher education programs.

In addition to lacking ethnic and racial diversity, the students in this year's sample are primarily monolingual. Three-fifths of the sample (60.4%) speak only English, one-fifth speak Spanish (20.8%), 11.4 percent speak French, and 5 percent speak German. Of the two-fifths of students who indicated that they speak a language other than English, only 14.4 percent considered themselves fluent in that language.

The vast majority of the students--92.9 percent--attended school full time (12 credits or more during the spring 1988 term). Slightly more than half of the students (50.1%) were commuters, while the remainder lived in residential housing. The average annual cost of attending college (including tuition, room, board, books, and incidentals) for the three groups of students was \$5,788. Specifically, students' estimates show that the cost of attending Stratum 1 institutions is \$7,324; for Stratum 2, \$4,696; and for Stratum 3, \$5,344. Thus, at a rate of 4.5 years of college, the average reported in the RATE studies, the average cost of the three types of institutions would be approximately \$33,000, \$21,000, and \$24,000 respectively, or an average of \$26,000.

Students' sources of financial support. In rank order, the sources of support to attend college across strata, for students in this year's sample are family resources, loans, grants, employment, personal savings, scholarships and/or fellowships, and finally, work-study assistance. Figure 5 shows percentages of students' estimates of sources of financial support for their education. The predominant source--family resources--averages 41.4 percent across the three strata.

Figure 5
Sources of Financial Support



Source: 1988 RATE Project Student Survey

Students' home communities. In general, most of the students in the sample come from homes near to the campuses they attend: Slightly more than 73 percent of the sample were enrolled in schools 100 miles or less from their homes. Approximately 18 percent were in schools less than 10 miles from their homes, 36 percent between 10 and 50 miles from home, 19 percent between 51 and 100 miles from home, and another 23 percent between 101 and 500 miles from home. Only 1.6 percent attended school more than 1,000 miles from home. Across strata, slightly more than three-fourths of the students at Strata 2 and 3 institutions were 100 miles or

less from their homes, compared with about two-thirds of students at Stratum 1 institutions. Almost two-thirds of students who attended Stratum 2 schools (61.4%) were closest to their homes--that is, 50 miles or less-- followed by students at Stratum 3 (55.6%) and Stratum 1 (41.8%) institutions.

The distribution of the students' types of home community is different from that of last year's study, in part because the category "suburban" in RATE II was divided into two categories--"small town" and "suburban"--in RATE III. More than half of the sample (50.2%) grew up in rural areas or small towns, while fewer came from suburban areas. More specifically, 34.8 percent of this year's sample was raised in small towns, 28.3 percent in suburban areas, 15.4 percent in rural areas, 11.5 percent in urban areas, and 8.4 percent in major metropolitan areas.

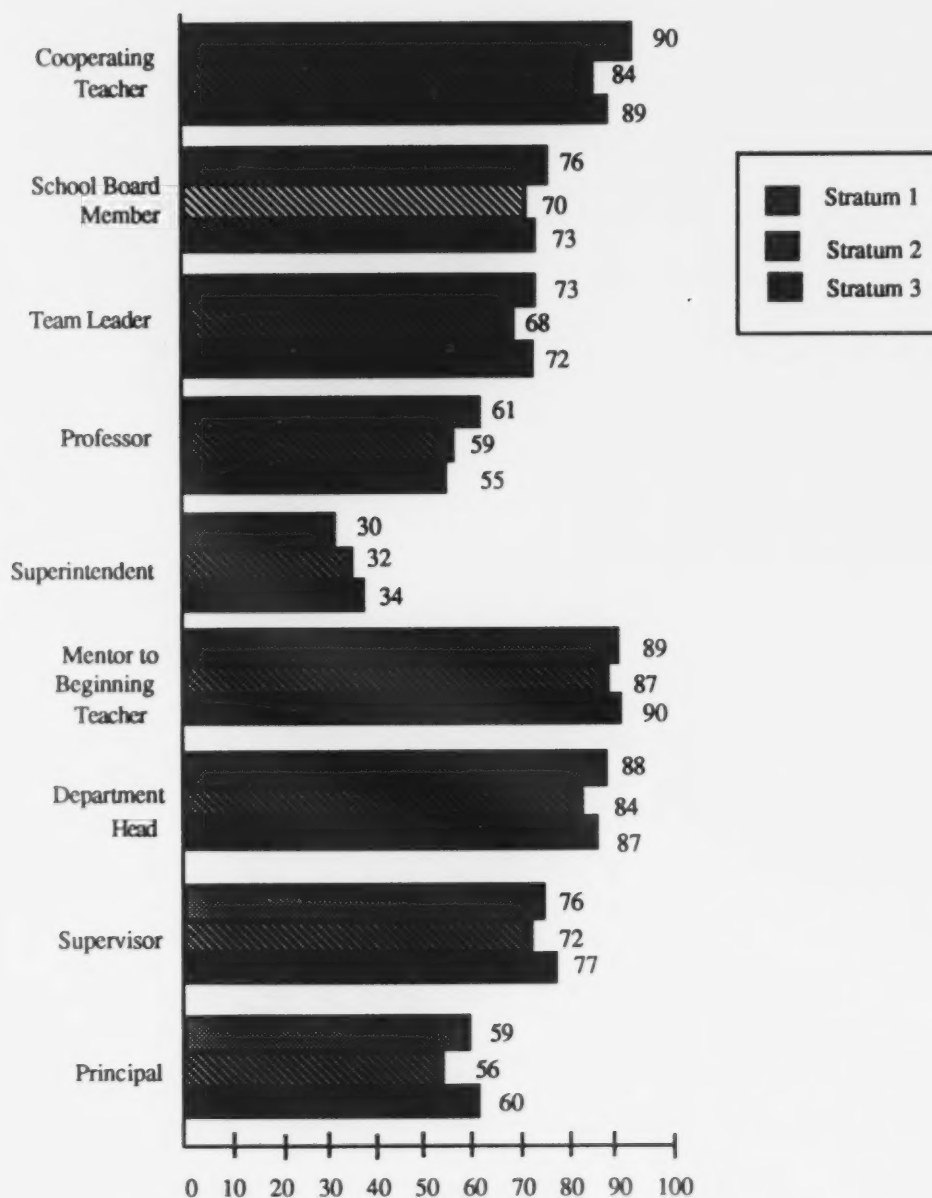
Career Data

This section reports students' responses to questions about teaching as a career. The majority of students in the sample indicated that they were "very positive" (74.3%) or "positive" (20.2%) about teaching as a career. All but 1 percent of the remaining 5.5 percent of student respondents chose the neutral rating on the survey questionnaire.

When asked if they intend to teach after graduation, 93 percent of the students responded affirmatively. Of the 7 percent who answered "no," 39.5 percent said they plan to go on to graduate school, 19.8 percent expect to work in a field related to education, and 12.8 percent plan to work in a field unrelated to education. Almost one-fifth (17.4%) selected the "other" response, and 10.5 percent were "undecided." Most respondents plan long teaching careers: 36 percent plan to teach 20 years or more, 21.4 percent between 11 and 20 years, 15.5 percent between 6 and 10 years, and 7.5 percent between 1 and 5 years. Almost one-fifth of the students (19.5%) are uncertain of their future career plans.

Long-term career goals. In RATE I and II students were asked the extent to which various factors influenced their decisions to enroll in a teacher education program. Rather than repeat this question annually, RATE III asked students about their long-term career goals. Figure 6 reflects responses by institutional type to career options available to classroom teachers.

Figure 6
Educational Career Options Students Would Consider

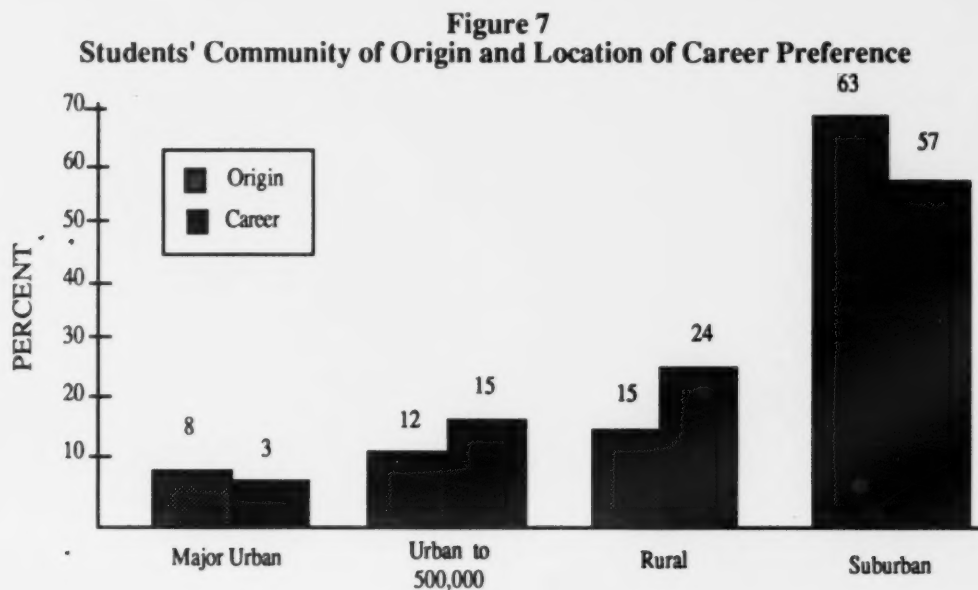


Source: 1988 RATE Project Student Survey

For purposes of displaying the data, students' responses were clustered from "might" to "would definitely seek this role" and are presented in the order in which the career choices appeared on the survey. Highest-ranking percentages are for the role of mentor to a beginning teacher, followed closely by the roles of cooperating teacher and team-teaching leader or department head. Least appealing appear to be administrative roles (superintendent or principal), followed by the role of professor. Modest institutional differences of 3 to 6 percent variations could indicate to some extent the degree to which these roles were modeled effectively and/or were discussed with students.

Salary. Students were asked to indicate how adequate they thought a teacher's salary was to support a single person or a family. Seventy-four percent indicated that it was "adequate" or "more than adequate" to support a single person. The majority (89%) thought that it was "less than adequate" to support a family. Only 10.5 percent believed that a teaching salary was "adequate" to support a family.

Geographic preference. With respect to geographic teaching preference, more than half (57%) of the students in this year's sample would like to teach in suburbia, about one-fourth (24.4%) in rural areas, and about 18 percent in urban or major urban areas. These results correspond to similar percentages for community of origin for the student respondents. Figure 7 compares the types of communities in which respondents spent the major portion of their youth with the types of communities where students would seek initial teaching positions.



Source: 1988 Rate Project Student Survey

Since the majority of students attend school fairly close to their homes, the data regarding preferred career location hold to the same pattern. Most students would like to stay close to their hometowns to teach (79%), within a 50-mile radius of their graduating institutions (76%), in their home states (77%), or within their geographic regions (60%). Little more than one-fourth of the respondents (27.4%) are interested in teaching anywhere in the country, and 22.6 percent would consider a position outside the United States.

College Matriculation Patterns

Among the students in this year's response group, 58 percent entered as freshmen the college they are now attending, while the remaining 42 percent transferred from another college. A higher percentage of students within Stratum 1 institutions entered there (69%), compared with 54 percent in Stratum 2 and 56 percent in Stratum 3 institutions. Of the 42 percent who transferred from another college, 43 percent came from a community college, 6 percent from a two-year branch or extension campus, 30 percent from a state institution, and 19.4 percent from a private institution. Students who transferred from another institution were awarded slightly more than two years of college credit (71.6 quarter hours or 53.8 semester hours) by the college or university to which they transferred.

Academic major. Slightly more than three-fourths (76.4%) of the sample indicated that they did not have an academic major other than education, and almost the same number (72.1%) reported that they did not have an academic minor. The largest number of students with double majors attended Stratum 2 (111) and Stratum 3 (105) institutions, compared with 51 students who attended Stratum 1 schools. However, 70 percent and 80 percent of the students in Stratum 2 and Stratum 3 institutions, respectively, did not have an academic major other than education. Majoring in elementary education is the traditional matriculation pattern for prospective elementary school teachers, whereas prospective secondary school teachers typically indicate a discipline major (e.g., English education, social studies education). Current reform initiatives encourage discipline-related majors for students preparing to be elementary teachers, particularly if they are enrolled in postbaccalaureate programs. However, students sampled by RATE III were most likely to be enrolled in traditional programs.

THE ELEMENTARY EDUCATION PROFESSORiate

The faculty members surveyed in RATE III were a sample of those who taught in the elementary education programs. Faculty respondents provided demographic information; descriptions of time allocation in teaching, research, and service; perceptions of the education programs in which they teach; and perceptions of their students' level of preparation to teach at the end of the program.

Demographic Data

Racial/Ethnic Composition. The elementary education professoriate surveyed in this study is almost 92 percent White, and about five percent Black (Table 5). Hispanics, Asians, Pacific Islanders, and American Indians combined made up the other 4 percent of faculty who responded to the survey. There was little variation in the racial/ethnic composition of faculty by type of institution. The demographic information on the elementary education professoriate is similar to that in the previous RATE studies, revealing little racial or ethnic diversity in the teacher education faculty.

Gender Composition. The elementary education faculty was 53.4 percent male and 46.6 percent female. Unlike the racial/ethnic distribution, the gender distribution varied according to type of institution (Table 6). In Stratum 1 institutions, female faculty are in the majority at 58.7 percent; in Stratum 2 institutions, the faculty is 51.4 percent male and 48.6 percent female. In Stratum 3 institutions, however, the faculty is predominantly male: 64.4 percent.

Table 5
Racial/Ethnic Composition of Elementary Education Professoriate

Racial/Ethnic Group	Stratum 1		Stratum 2		Stratum 3	
	n	%	n	%	n	%
White	73	92.4	64	95.1	93	92.1
Black	3	3.8	6	3.5	4	4.0
Hispanic	0	0.0	1	1.4	1	1.0
Asian/Pacific	1	1.3	0	0.0	3	3.0
American Indian/ Alaskan Native	2	2.6	0	0.0	0	0.0

Source: 1988 RATE Project Faculty Survey

Table 6
Gender of Elementary Education Professoriate

Gender	Stratum 1	Stratum 2	Stratum 3	Total
Male	41.3	51.4	64.4	53.4
Female	58.7	48.6	35.6	46.6

Source: 1988 RATE Project Faculty Survey

Rank and Tenure. The elementary education professoriate is about 65 percent tenured, and just under 25 percent of the remaining faculty hold tenurable positions (Table 7). The remaining 10 percent of faculty teaching elementary education courses either have permanent but nontenured appointments or are ineligible for tenure appointment. Stratum 3 institutions have the highest percentage of tenured faculty (73.3%). Stratum 2 institutions have the highest percentage of faculty on tenure lines but not yet tenured (31.0%).

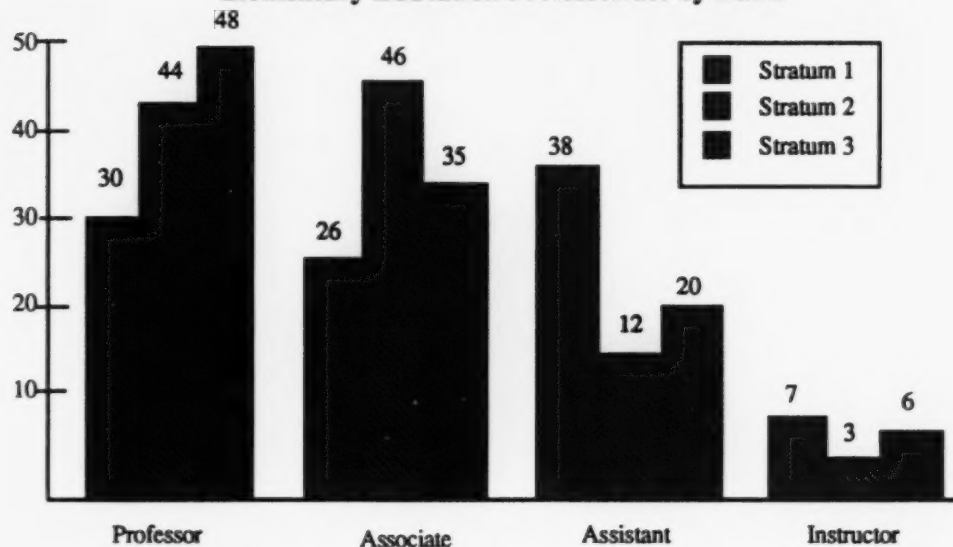
Table 7
Tenure Status of Elementary Education Professoriate

Tenure Status	Stratum 1		Stratum 2		Stratum 3		Total	
	n	%	n	%	n	%	n	%
Tenured	43	55.8	45	63.4	74	73.3	162	65.1
Tenure line	22	28.6	22	31.0	17	16.8	61	24.5
Nontenured, Continuous Appointment	10	13.0	2	2.8	3	3.0	15	6.0
Ineligible	2	2.6	2	2.8	7	6.9	11	4.4

Source: 1988 RATE Project Faculty Survey

The majority of the elementary education faculty are at the level of either associate professor or full professor (Figure 8). Once again, Stratum 3 institutions have the highest percentage of faculty at the higher ranks: 83 percent of the faculty holds the rank of either professor or associate professor. The most common rank in Stratum 2 institutions is associate professor (46%), and the most common rank in Stratum 1 institutions is assistant professor (38%).

Figure 8
Elementary Education Professoriate by Rank



Source: 1988 RATE Project Faculty Survey

Professional Experiences. The typical faculty member in elementary education has been employed by his or her current institution for an average of 12 years. Approximately 15 percent of the respondents are uncertain about their future plans, and about 75 percent expect to continue working at their current institutions for the foreseeable future.

Elementary education faculty members have had extensive experience in elementary and secondary schools prior to their careers in higher education. Almost 80 percent of the elementary education faculty have been elementary school teachers, and 34 percent have been middle school teachers. More than 37 percent have taught secondary school, and just under 15 percent have served as either a department chair or a curriculum supervisor in K-12 schools.

Professors' Perceptions of Academic Life

Respondents were asked to note how they spend their time in the three traditional areas of academic life--teaching, scholarship, and service--and to indicate the extent to which their allocation of time matched their institutions' expectations and their own preferred allocation of time. Overall, elementary education faculty in all three institution types reported that they spend more than 60 percent of their time on teaching, approximately 15 percent on scholarship, and about 20 percent on service activities. There are, however, differences by stratum. Professors at Stratum 1 institutions believe that their institutions would like them to spend less time teaching

and more time on service than they are presently spending; while at Strata 2 and 3 schools, there is more emphasis on scholarship (Table 8). Across strata the respondents would prefer to reduce the percentage of time on teaching. The ideal allocation of time would be 55 percent of time devoted to teaching, 25 percent to research, and 20 percent to service. It is interesting to note that respondents from Stratum 1 institutions perceived their institutions would prefer to see more time allocated to service than research, their personal preferences to increase the time they spend on research matched the responses of respondents at Stratum 2 and Stratum 3 institutions.

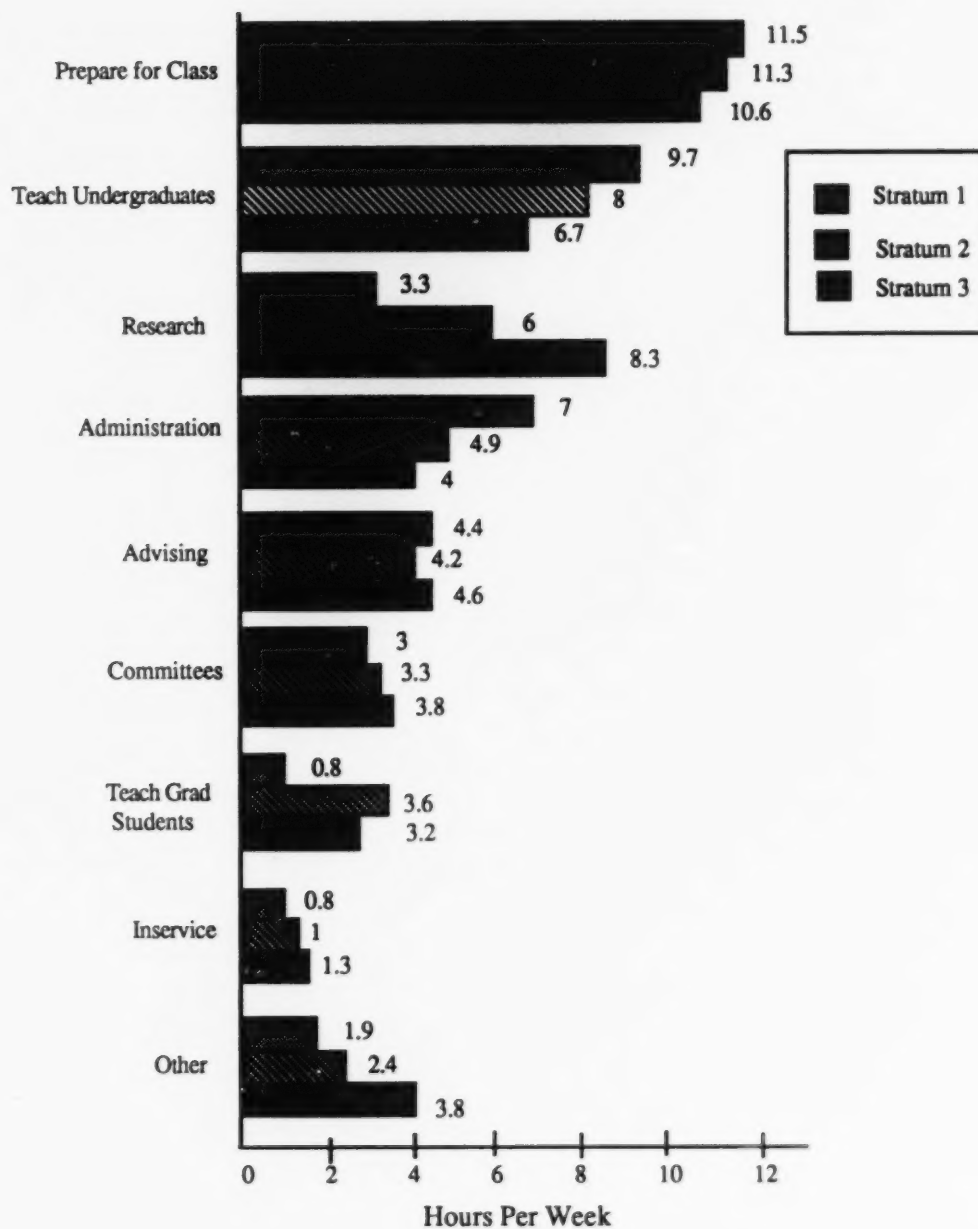
Table 8
Allocation of Faculty Time

<u>Percentage of Time Spent</u>			
Type of Institution	Teaching	Research	Service
Stratum 1	62.5	13.0	24.6
Stratum 2	67.9	13.2	18.3
Stratum 3	63.4	17.8	19.3
<u>Percentage of Time Institution Desires</u>			
Type of Institution	Teaching	Research	Service
Stratum 1	59.1	17.3	23.6
Stratum 2	60.1	20.8	17.6
Stratum 3	51.6	31.8	16.5
<u>Percentage of Time Ideal</u>			
Type of Institution	Teaching	Research	Service
Stratum 1	55.2	24.7	28.0
Stratum 2	56.4	24.7	17.4
Stratum 3	56.0	26.8	17.1

Source: 1988 RATE Project Faculty Survey

When respondents were asked more specifically about how their time was spent during a typical week, their responses were consistent with the overall time allocations they had indicated. Across strata, professors spent the most time preparing for class or in direct contact with students through teaching and advising (Figure 9). Faculty at Stratum 1 institutions reported that they spent most of their week teaching undergraduates (9.7 hours per week) and preparing for class (11.5 hours per week). Stratum 2 faculty also reported that they spent the greatest number

Figure 9
Weekly Distribution of Faculty Time



Source: 1988 RATE Project Faculty Survey

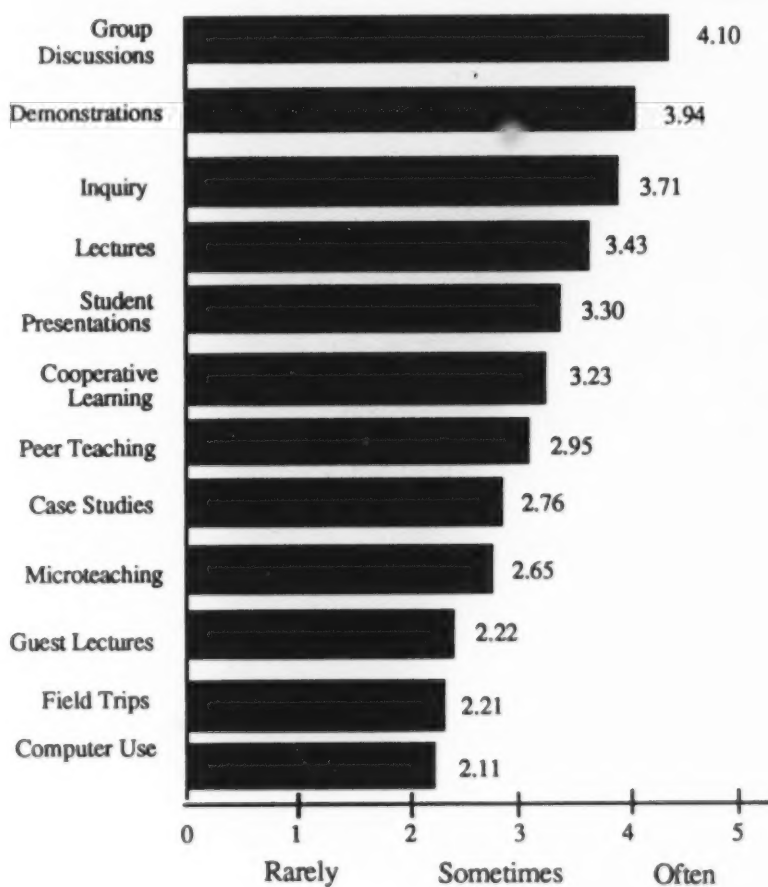
of hours per week in activities related to students. Stratum 2 faculty spent almost the same amount of time planning as did Stratum 1 faculty, but the former spent more time in actual teaching--8 hours per week teaching undergraduate students and 3.6 hours per week teaching graduate students. Stratum 3 faculty reported spending the fewest hours per week in tasks related to students. Most of the difference is in the number of hours of teaching per week; Stratum 3 faculty reported spending an average of 6.7 hours per week teaching undergraduates and 3.2 hours per week teaching graduate students.

Field Experiences. Faculty reported on the extent to which they were involved in seven types of activities in K-8 schools. Across all strata, the most common purpose for being in K-8 schools was to supervise preservice teachers, either in early field experiences or in student teaching. Faculty from Stratum 1 institutions reported spending the most time in the field supervising (6 hours/week), particularly early field experiences. Faculty in Stratum 3 institutions spent only one-half that amount of time per month in supervisory activities (3 hours/week), and about two-thirds the amount of time per month overall in all field experiences (6 hours/week). Stratum 3 faculty spent approximately 2.6 hours per month in the field as consultants and about 4 hours per month in the field conducting research; those two categories combined equaled the amount of time they reported (6.6 hours/month) in supervisory field activities.

Instruction. As Figure 10 indicates, the three most commonly used instructional methods reported were group discussions (4.10 on a 5-point scale), demonstrations (3.94), and inquiry/discovery approaches (3.71). The three least-used methods were computer use (2.11 on a 5-point scale), field trips (2.21), and guest lectures (2.22).

More than half of the respondents reported that their courses had a school-based component. Thirty-five percent of those with a school-based component did not visit students in the field during the course, but 29 percent did so one to three times during the course, and over 35 percent did so more than three times.

Figure 10
Instructional Methods Used in Elementary Methods Courses



Source: 1988 RATE Project Faculty Survey

STUDENT AND FACULTY PERCEPTIONS OF PROGRAM QUALITY

As in previous RATE studies, most faculty and students assessed very positively the overall preservice teacher preparation programs with which they are affiliated. Across the three institutional strata almost three-fourths of the faculty respondents (73.5%) rated their elementary teacher preparation programs as above average or excellent, slightly higher than the percentage of respondents last year (69.7%). The faculty in Stratum 1 institutions were especially positive: almost 90 percent of the faculty rated their elementary programs above average. The percentage of faculty responding favorably was closer to two-thirds in the other two strata (68.9% in Stratum 2 and 65.3% in Stratum 3). Students enrolled in the programs were even more positive in their ratings than the faculty. Slightly more than 80 percent (80.9%) of the students rated their programs 4 and 5 on a 5-point scale, with only a small percentage rating their programs below average.

Studies in the liberal arts and sciences constitute a major portion of the college curriculum for prospective teachers. The faculty and the students were asked to assess the importance and the quality of these studies. Almost four out of five faculty rated the courses in the liberal arts and sciences very important (77.8%); the remaining respondents rated them important. The responses of the faculty on the quality of the courses were more varied. About one in five faculty rated these studies as less than adequate (22.2%), with the remaining responses evenly divided between being adequate (26%), good (26%), and excellent (26%). A considerable majority of students also viewed these general studies as either very important (64.7%) or important (28.8%) to the education of an elementary teacher, and they were more positive than the faculty in their assessment of the quality of the courses. Almost one-half (47.6%) reported that they were adequate, and the remainder (41.5%) rated them as good or excellent. Only about 1 in 10 (11.6%) rated courses as less than adequate. Students in Stratum 1 institutions viewed the quality of general studies the

most positively, with slightly more than half of the students in these institutions (53.1%) rating their general studies as good or excellent compared with slightly more than one-third of the students in the Stratum 2 (36.5%) and Stratum 3 (37.1%) institutions.

Response rates remained stable for the third consecutive year when assessments of students' general abilities to teach as entry-level teachers are compared with assessments of their ability to teach in a culturally diverse setting or with at-risk students. For example, more than 7 in 10 of the faculty (70.7%) and a higher percentage of the students (77.1%) assessed their general preparation as entry-level teachers as more than adequate. The majority of the remaining respondents rated their preparation as entry-level teachers as adequate. These percentages are up slightly from last year. However, when students and faculty assessed the adequacy of their elementary teacher education programs in terms of preparation for teaching disadvantaged learners in culturally diverse settings, slightly over one-third of the faculty (33.4%) and almost one-fourth of the students (24%) indicated that their preparation was less than adequate.

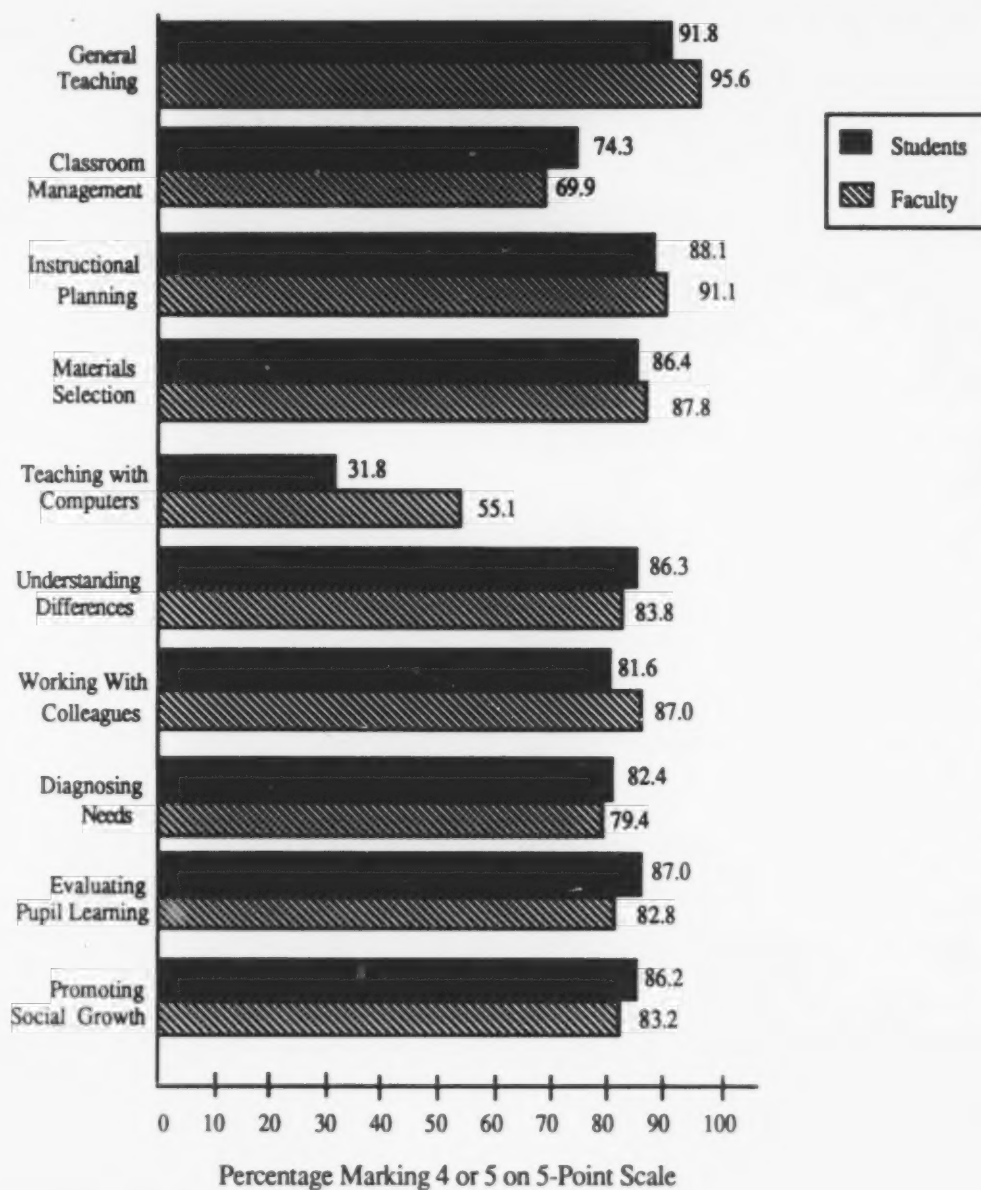
To discriminate more precisely where students and faculty view specific strengths or weaknesses, respondents were asked to rate the adequacy of preparation in terms of a number of core teaching functions (Figure 11).

Both students and faculty generally view preparation for assuming the core functions of a teacher as adequate. The responses of faculty and students are quite similar, with faculty ratings slightly higher in five instances and students slightly higher in four. The only major discrepancy is in the ability to use computers in teaching and learning: considerably more faculty (55.1%) reported good or excellent preparation than did students (31.8%). While the ratings are generally quite high, there are areas of concern nonetheless. For example, more than 60 percent of the students reported that they are not well prepared to teach with computers; about 25 percent projected problems with classroom management, and from 15 to 20 percent foresaw problems in understanding student differences, accurately diagnosing students' needs, promoting social growth, and evaluating student learning.

Rigor in Elementary Methods Courses

Faculty and students were asked to compare the rigor of courses in the elementary sequence with that of courses at a comparable level outside of the SCDE. The majority of both faculty and students rated elementary education courses as rigorous as or more rigorous than noneducation courses. For example, slightly more than two-fifths of the faculty (43.6%) rated education courses as rigorous as other courses, and about one-third (35.7%) rated education courses as more rigorous than comparable noneducation courses. Slightly more students (38.8%) than faculty rated the education courses as more rigorous than noneducation courses. These responses have remained similar over the three years of data collection.

Figure 11
Students' and Professors' Perceptions of Students' Readiness for Teaching



Source: 1988 RATE Project Faculty and Student Surveys

To provide more specific benchmarks for estimating the rigor of courses in the elementary program versus the rigor of noneducation courses, students and faculty were also asked to compare the elementary courses in the professional sequence with the most advanced courses they had taken in English, history, foreign languages, science, and mathematics. There has been a long-standing concern about the level of intellectual challenge presented in elementary education courses, but the perceptions of students and faculty appear to refute these concerns. Table 9 presents the responses of elementary faculty and students.

Table 9
Perceived Rigor of Elementary Methods Courses
Compared with Arts and Sciences Courses

Arts & Sciences Courses	Less Rigorous %	As Rigorous %	More Rigorous %	No Basis for Judgment %
English				
Faculty	8.5	42.0	34.1	16.4
Students	16.8	42.0	34.7	6.5
History				
Faculty	7.7	37.0	36.4	18.9
Students	19.7	37.1	32.0	11.2
Foreign Languages				
Faculty	16.3	36.9	20.6	26.1
Students	18.0	17.4	12.9	51.0
Science				
Faculty	22.4	48.9	19.1	14.8
Students	28.6	36.4	29.7	5.3
Mathematics				
Faculty	25.2	41.6	18.9	14.2
Students	28.8	33.6	32.7	4.9

Source: 1988 RATE Project Faculty and Student Surveys

A considerable majority of faculty and students view methods courses to be as rigorous as or more rigorous than the most advanced courses in each of five subject areas, the one exception being foreign languages. Specifically, approximately three-fourths of the faculty rated the elementary methods courses as rigorous as or

more rigorous than a course at a similar level (upper division) in English and history (76.1% and 73.4%, respectively); student ratings were comparable. Between about 60 percent and 70 percent of the faculty rated their elementary methods courses as rigorous as or more rigorous than the remaining three subjects: foreign languages, science, and mathematics. Again, student responses were similar, the major exception being foreign language where only 17.4 percent rated their elementary courses as rigorous and 12.9 percent more rigorous. Interestingly, more than half of the students (51.7%) responding to the foreign language item chose "no basis for comparison," indicating they had taken no course at the upper-division level outside of education. This condition further underscores the magnitude of a problem reported in the RATE I and RATE II reports: Education students tend to be parochial, monocultural and monolingual, in contrast to the diverse nature of the students they will teach in K-12 schools, especially in major urban areas.

Another attempt to infer something about the nature and rigor of the curriculum was an item that asked for perceptions of the "knowledge base" for teacher preparation compared to that which existed 10 years ago. Almost 9 in 10 faculty (89%) perceived the knowledge base for teacher education to be improved or much improved. A considerably higher percentage of faculty in Stratum 1 (58.9%) and Stratum 2 institutions (52.1%) than in Stratum 3 institutions (41.5%) view the increase in knowledge to support teacher preparation as much improved.

Two other items, at least indirectly, address the quality of instruction in elementary programs. Faculty and students were asked how frequently research studies were reviewed in their courses. The responses, while largely positive, were variable. Almost one-fourth of the faculty indicated that they rarely, if ever, incorporate research studies into their courses. Another 4 in 10 (42.5%) reported that they use research sometimes, and somewhat more than one-third (37.6%) reported that they use research frequently. Student responses were similar. Surprisingly, the highest percentage of use of research studies was reported in the Stratum 1 institutions, not in the more research-oriented Stratum 3 institutions.

In a parallel item, the frequency with which students were asked to engage in library research was assessed. Students and faculty indicated that library research is more common than the incorporation of research studies into the curriculum. More than one-third of the faculty (34.8%) indicated that they require library research sometimes, and almost half (46.4%) do so frequently. Students reported more frequent library research than did faculty; over half (52.4%) indicated that it occurs frequently.

Dominant Conceptions of Teaching

There is increasing attention in the teacher education literature to various conceptions of teaching that might provide some coherence and continuity to programs of teacher preparation. A basic assumption is that by revisiting core conceptions and central experiences throughout the program, students might build schemata to guide their thinking and actions about teaching and learning. An item was constructed for the RATE III questionnaires to ascertain whether there were, in fact, discernible dominant orientations that were used as conceptual organizers for

programs. Students and faculty were asked to assess whether any of the following five dominant conceptions were used in their programs: (1) skill or competency-oriented; (2) clinical or problem-solving in nature; (3) well-rounded, liberally educated person; (4) humanistic and person-oriented; and (5) inquiring and reflective in posture. Space was left for respondents to enter other possible dominant conceptions as well. Table 10 illustrates these responses across strata.

Table 10
Dominant Conceptions of Teacher Preparation in Elementary Education

Dominant Conception	Stratum 1 %		Stratum 2 %		Stratum 3 %		Total %	
	Stu.	Fac.	Stu.	Fac.	Stu.	Fac.	Stu.	Fac.
Skill or Competency	7.0	13.4	17.5	27.8	13.4	26.4	13.1	22.0
Clinical or Problem-solving	8.3	3.8	10.5	13.8	7.4	13.2	8.5	9.9
Liberally Educated	50.3	51.9	42.5	11.1	37.6	9.4	42.1	25.5
Humanistic and Person-oriented	19.1	19.2	15.5	19.4	19.1	30.1	18.0	23.4
Reflective and Inquiring	10.1	7.6	12.5	22.2	20.5	18.8	15.7	15.6
Other	5.1	3.8	1.5	5.5	2.0	1.8	2.6	3.5

Source: 1988 RATE Project Faculty and Student Surveys

Almost 60 percent of the faculty (57%) and almost two-thirds of the students (65%) reported that their programs were framed by one of these conceptions of teaching. Collectively across strata, faculty responses were fairly evenly divided between the liberal (25.5%), humanistic (23.4%), and skill (22%) orientations. About 1 in 7 faculty (15.6%) indicated that the inquiring and reflective perspective was dominant and less than 1 in 10 (9.9%) the clinical, problem-solving, or cognitive perspective that is so prevalent in the current research literature on teaching and teacher education.

As can be seen, stratum differences affect these aggregate responses. Perhaps understandably, more than half of the faculty in Stratum 1 institutions (51.9%) perceived the liberal arts orientation to be dominant. However, only about 10 percent of Stratum 2 and Stratum 3 faculty reported this as the dominant concept.

Less than 4 percent Stratum 1 faculty reported a cognitive or clinical perspective, contrasted with about 1 in 7 of those in Stratum 2 (13.8%) and Stratum 3 (13.2%) institutions. Stratum 2 faculty indicated first the skill orientation (27.8%) and then the inquiring (22.2%) and the humanistic orientations (19.4%). Stratum 3 faculty rated the humanistic perspective first (30.1%), followed by the skill perspective (26.4%). Thus, it appears in the major research institutions that a combined humanistic/skill-oriented conception of teaching is most common.

Students across all strata viewed the liberal arts orientation as dominant: 50.3 percent for Stratum 1, 42.5 percent, Stratum 2, and 35.5 percent, Stratum 3. These percentages are much higher for students than for faculty in the latter two types of institutions. Aggregate student percentages for the humanistic and the inquiring perspectives were 18 and 16 percent respectively. Only 1 in 12 (8.5%) of the students identified the cognitive perspective, and about 1 in 7 (13.1%) rated the skill orientation as predominant. Although the faculty rated the skill orientation somewhat higher, its low rating by the students raises questions given prevailing notions about the technical nature of teacher preparation in general and elementary education in particular.

Time

A number of items addressed the amount of time allocated to various activities during the programs. For example, one item asked whether there was sufficient time in an elementary education program to achieve the level of knowledge and skill necessary for a beginning teacher. A considerable majority of faculty reported that there was enough time or more than enough time. However, about one-third of Stratum 3 (33%) and Stratum 2 (30%) faculty reported that there is not enough time. Less than one-fifth (19%) of Stratum 1 faculty hold this view.

When faculty were surveyed about how difficult they believe it is to acquire both a well-rounded liberal education and the necessary professional preparation in four years of undergraduate study, slightly more than one-fourth (26.3%) indicated that it is very difficult, and approximately 41% reported that it is somewhat difficult. The percentage of the response "very difficult" is down considerably from the RATE II survey. Faculty in Stratum 1 institutions differed from faculty in the other two strata: 45 percent indicated that acquiring a sound liberal education along with sound professional preparation was not a problem in four years.

A third question concerned with time asked faculty and students how time-consuming they perceived education courses to be compared with courses outside the SCDE. Students' responses were all but unanimous that their education courses were as time-consuming (26%) as or more time-consuming (69.3%) than noneducation courses. Faculty responses were similar.

Resources

Students and faculty responded to an item designed to gain some insights into the adequacy of materials and resources available to the students in programs of elementary teacher preparation. These data are displayed in Table 11.

Table 11
Adequacy of Materials and Resources for Teacher Preparation

Materials and Resources	Nonexistent or Meager %		Modest %		Good or Excellent %	
	Fac.	Stu.	Fac.	Stu.	Fac.	Stu.
Curriculum and Materials Lab	16.3	8.3	35.4	29.5	48.3	62.2
Education Library	9.9	6.2	32.2	22.2	57.8	71.6
Video for Peer and Microteaching	20.8	19.7	30.4	31.3	48.8	49.0
Computer Facilities	8.8	21.1	28.9	27.6	62.3	51.3
Audiovisual Technology	7.5	10.5	21.5	28.7	71.0	60.8

Source: 1988 RATE Project Faculty and Student Surveys

Fewer than one-half of the faculty perceived curriculum laboratories or microteaching facilities as good or excellent. Students hold a more positive view of the curriculum laboratories but are equally concerned about microteaching facilities. Almost one-half (48.7%) of the students view computer facilities as nonexistent or modest, and a high proportion of the faculty (42.1%) view the education library similarly.

MULTIPLE PURPOSES FOR USING DATA IN TEACHER EDUCATION

Teacher education has long suffered from the myopic view that the purpose of research is to create new knowledge and that the creation of knowledge for knowledge's sake is sufficient justification for the research. That position, however, is indefensible for faculty members in a professional school. Although the creation of new knowledge is certainly important, knowledge can also be used to enhance the profession--a use that distinguishes a professional school from a college of letters and sciences. Six purposes for which data on teacher education can be used include: (1) public presentation, (2) policy development, (3) monitoring the profession, (4) institutional politics, (5) program improvement, and (6) research.

Public Presentation

Teacher educators have finally realized that the way teacher education is presented to the public is of crucial importance. Now more than ever, teacher educators need to be concerned about the public's image of the field, because now more than ever, teacher education is in the public eye. The historic lack of regard for public relations has left teacher education vulnerable to the criticisms that have been leveled against it.

Probably the single most powerful criticism concerns the quality of students. The public perception is that students who elect to become teachers typically are drawn from the bottom of the various student quality indicators. That criticism has essentially gone unanswered.

Data from the RATE study, while shedding light on the topic, fail to answer it conclusively. Only about one-quarter of the institutions participating in the RATE study have been able to provide reliable and accurate data concerning college entrance examinations; more institutions have provided data on high school rank and grade point average.

The data that have been gathered simply do not support the notion that teacher education students are at or near the bottom of the barrel. In fact, teacher education students in general maintain grade point averages above 3.0, including courses taken outside the school of education. These students were graduated on average at about the 70th percentile in high school class rank; and where data could be gathered, teacher education students' average combined SAT scores of about 900, above the national average for all college-bound students. Teacher educators, for whatever reason, decided that these data were too inconclusive to support a strong statement, although no questions have been raised about the quality of the data used to argue academic ineptitude. Regardless of how one might feel about public relations, it clearly constitutes one viable use of RATE data.

Policy Development

Policy development is the result of a complex political process and takes place at all levels from departmental to international. The challenge for the policymaker is to find political justification and support for desirable policy, and data are essential to inform that process. While the existence of data is not necessarily the most important aspect of developing an educational policy, data can help individuals to build both political rationale and political support.

One obvious example of an area in which data can inform a policy decision is the shortage of minority students in teacher education. Approximately 90 percent of the students who enter teacher education programs are White. About 5 percent are Black, and about 2.5 percent are Hispanic. Other visible minorities constitute the remaining 2 or 3 percent of the student population. The findings from the RATE study are consistent with a number of other studies on this subject, and the need for public policy is evident.

Monitoring the Profession

It is incumbent on the profession to monitor teacher education. Data on program array, the number and type of field experiences, and other program characteristics can provide guidelines by which program developers and institutional leaders can make appropriate decisions on questions such as enrollment cutoffs, resource allocations, and curricular improvements. Institutional program planners can use data for comparative purposes, to understand their own programs, to raise questions with their faculties, and to stimulate discussions and analyses in their institutions. This does not suggest that large sample averages should dictate program development in individual institutions. Rather, it suggests that when a program diverges from the average, the institution's program planners can analyze the data and decide whether the variance their program exhibits is appropriate.

Institutional Politics

The politics of higher education usually boil down to the allocation of resources. Although most faculty members have some interest in this area, deans and other administrators are the most involved in using data in the context of the politics of the institution.

Once again, data from a national study can probably best be used to compare the situation in a given institution with a national norm. In some cases, the comparison might help the institution build a case for more resources, while in other instances the comparison might be harmful. Thus, institutional administrators are likely to be somewhat selective of the data they use to build their cases; and when the data do not support their positions, at least they are forewarned.

Embedded in the RATE data are some worthwhile examples of how data can be used for institutional political purposes. For example, Strata 1 and 2 faculty teach approximately eight courses per year, exclusive of paid overload. A given institutional administrator can use such faculty load data to support the position that (1) more faculty positions are needed; (2) expectations for productivity in other areas should be altered because teaching loads are too high; or (3) teaching loads should be reduced in order to promote heightened scholarly productivity.

Fiscal data is probably the most important kind of data that can be used for institutional political purposes. Since the purpose of the RATE study precluded gathering much fiscal data, such data should be obtained elsewhere.

Program Improvement

To most teacher educators, the desire to improve individual programs is probably the most compelling reason for gathering data. The use of data to improve programs does not necessarily mean major restructuring or revolutionary change; data can be used as well for fine-tuning programs and making small substantive changes.

Data from a national study can probably best be used to provide baseline data for individual programs. From these data, comparisons can be made and questions raised regarding the effectiveness of the program. For example, when asked how well teacher education programs prepared them to teach along a variety of dimensions, less than one-third of the student respondents in the RATE study felt comfortable teaching with computers, and only about one-half believed they were well prepared to manage misbehavior in the classroom. These kinds of data should serve as early warning signs, leading practitioners to consider whether to revise the program. The data cited earlier concerning the reluctance of education students to consider teaching in core urban areas or children who are out of the mainstream should also stimulate analysis of a specific program's approach to preparing students to work in these contexts.

Research

Many research reports conclude by stating that more research should be conducted as a result of current findings. Because teacher education programs tend to be diverse and are not fully understood, accurate presentations of data should certainly stimulate the development of important questions. The data from the RATE surveys of the past three years could generate literally pages of questions that probably would not have emerged otherwise, and each of these questions could be translated into a worthwhile research project. Questions based on existing data are likely to be more focused and more important than questions derived in other ways. Examples of questions that emerge from the RATE data are as follows:

- What are the differences in teacher education programs at small independent colleges versus large research universities and what makes these differences relevant?
- Has the proliferation of field experiences in teacher education programs made a discernible difference in how teachers think or behave in the classroom?
- How do teachers who worked with computers in their preparation programs differ from teachers who had no exposure to computers?

In a field such as teacher education, research should feed on itself. As more and more is learned about teacher education programs, more salient questions can be asked, more focused research can be proposed, and more powerful knowledge can be generated.

APPENDIX

Participating Institutions in the 1988 RATE Survey

Alabama State University Montgomery, AL	Concordia College of Wisconsin Mequon, WI
Anderson College Anderson, IN	Drake University Des Moines, IA
Augusta College Augusta, GA	Eastern Illinois University Charleston, IL
Augustana College Rock Island, IL	Eastern Kentucky University Richmond, KY
Baker University Kansas City, MO	East Tennessee State University Johnson City, TN
Bellarmino College Louisville, KY	George Mason University Fairfax, VA
Belmont College Nashville, TN	Georgian Court College Lakewood, NJ
Bethel College St. Paul, MN	Georgia Southern University Statesboro, GA
Chaminade University of Honolulu Honolulu, HI	Graceland College Lamoni, IA
City College, CUNY New York, NY	Grand Canyon College Phoenix, AZ
College of William & Mary Williamsburg, VA	Harding College Searcy, AR
Concordia College River Forest, IL	Hope College Holland, MI

Idaho State University Pocatello, ID	Mobile College Mobile, AL
Illinois State University Normal, IL	Monmouth College West Long Branch, NJ
Indiana University Bloomington, IN	Newberry College Newberry, SC
Indiana University of Pennsylvania Indiana, PA	Niagara University Niagara, NY
John Brown University Siloam Springs, AR	Nicholls State University Thibodaux, LA
Kean College of New Jersey Union, NJ	Northern Illinois University Dekalb, IL
Kentucky State University Frankfort, KY	Northern State College Aberdeen, SD
Lehigh University Bethlehem, PA	Ohio Dominican College Columbus, OH
Lock Haven University Lock Haven, PA	Oklahoma Baptist University Shawnee, OK
Luther College Decorah, IA	Oklahoma State University Stillwater, OK
Milligan College Milligan College, TN	Pittsburg State University Pittsburg, KS
Mississippi State University State College, MS	Samford University Samford, AL

Slippery Rock University
Slippery Rock, PA

Southern Illinois University
Carbondale, IL

SUNY-Plattsburgh
Plattsburgh, NY

Taylor University
Upland, IN

University of Akron
Akron, OH

University of Delaware
Newark, DE

University of Georgia
Athens, GA

University of Hawaii at Manoa
Honolulu, HI

University of Houston
Houston, TX

University of Kentucky
Lexington, KY

University of Maine at Farmington
Farmington, ME

University of Miami
Coral Gables, FL

University of North Carolina at Charlotte
Charlotte, NC

University of Nebraska at Omaha
Omaha, NE

University of North Dakota
Grand Forks, ND

University of North Florida
Jacksonville, FL

University of Northern Iowa
Cedar Falls, IA

University of Pittsburgh
Pittsburgh, PA

University of Science and Arts
Chickasha, OK

University of Scranton
Scranton, PA

University of Tennessee
Knoxville, TN

University of Texas at El Paso
El Paso, TX

University of Vermont
Burlington, VT

Utah State University
Logan, UT

Valparaiso University
Valparaiso, IN

Virginia Commonwealth University
Richmond, VA

Wake Forest University
Winston-Salem, NC

Washington State University
Pullman, WA

Wayne State University
Detroit, MI

West Virginia Institute of Technology
Montgomery, WV

West Virginia University
Morgantown, WV

Wichita State University
Wichita, KS

William Penn College
Oskaloosa, IA

APPENDIX

Confidence Levels for Data by Type and Strata

Inference About	N	n	Error at the 95% Means	Confidence Level ($p < .05$)
INSTITUTIONS				
Total	710	76	.23	.11
Stratum 1	230	26	.39	.19
Stratum 2	319	22	.38	.19
Stratum 3	163	29	.31	.16
PROFESSORS				
Total		251	.14	.07
Stratum 1		76	.30	.15
Stratum 2		71	.30	.15
Stratum 3		101	.24	.12
STUDENTS				
Total		1141	.05	.026
Stratum 1		263	.15	.073
Stratum 2		372	.14	.069
Stratum 3		506	.09	.049

AACTE

One Dupont Circle, Suite 610
Washington, DC 20036-2412
(202) 293-2450